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EXAMINER	
YUEN, KAN	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/797,520	WING, DANIEL G.	
	Examiner	Art Unit	
	KAN YUEN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *21 December 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-45* is/are rejected.

7)☒ Claim(s) *46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *21 December 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Arguments

1. Applicant's arguments with respect to claims 1, 10, 21, and 30 have been considered but are moot in view of the new ground(s) of rejection.

2. Applicant's arguments filed 12/21/2007 have been fully considered but they are not persuasive.

3. Applicant argued in claim 16 that neither references of Farrell or Wen teach the limitation of an expiration message that identifies a time value associated with when the trace packet was received. Examiner disagreed. In reference of Farrell, the source node determined that the response is an ICMP time exceeded message, the node at which packet expired is recorded. The process may also record the hop, or internodal segment time delay between the nodes at which the packet expired. Further detailed of the internodal segment can be found in paragraph 0025 or as sited by applicant in remark page 14, which states “by measuring the time between when an application packet is sent and when the error notification is received, it is also possible to determine a delay for each internodal segment on the route". Thus, time out error message generated by the intermediate node is associated with a time value, wherein the message received by the source node can measure the time delay based on the time value related information. Thus, the references of Farrell in combination of Wen overcome the argument.

Claim Rejections - 35 USC § 103

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1, 3, 10-12, 21, 23, 30, 32, 42, 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Bennett (Pat No.: 7336620).

For claim 1, Farrell et al. disclosed the method of varying a Time To Live (TTL) value in a trace packet addressed to a destination endpoint **(fig. 1, 104)** to intentionally cause an intermediate node **(fig. 1, 106)** other than the destination endpoint in the packet switched network to send back a packet expiration notice **(see paragraph 0017, lines 1-10, paragraph 0020, lines 1-12, paragraph 0021, lines 1-10, and fig. 1).** The trace or test packet is injected with TTL values, while gradually increasing. Upon time out, or when TTL=0, the intermediate node 106A sends back an error message 107 to source node 102. However Farrell et al. did not explicitly disclose the method of

receiving an intermediate node time value in the packet expiration notice indicating when the intermediate node received the trace packet.

Bennett from the same or similar fields of endeavor teaches the method of receiving an intermediate node time value in the packet expiration notice indicating when the intermediate node received the trace packet **(column 16, lines 45-67, column 17, lines 1-35).** As shown in column 17, example is taught. Host A sends an Echo request to D with a TTL of 255 and both intermediate nodes B and C insert Path Records, wherein the path records are the timestamps. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Bennett in the network of Farrell et al. The motivation for using the method as taught by Bennett in the network of Farrell et al. being that it increase the speed of error detection.

Regarding claim 3, 23, 32 Farrell et al. disclosed the method of setting a first TTL value in a first trace packet causing a first intermediate node to send back a first packet expiration notice with a first time value associated with a one-way packet delay to the first intermediate node; and setting a second larger TTL value in a second trace packet causing a second intermediate node other than the destination endpoint to send back a second packet expiration notice with a second time value associated with a one-way packet delay to the second intermediate node **(see paragraph 0017, lines 1-10, paragraph 0020, lines 1-12, paragraph 0021, lines 1-10, paragraph 0024, lines 5-12, and fig. 1).** The second large TTL is 2 as shown in paragraph 0021. The use of TTL value is used to measure the delay experience by routers.

Regarding claim 10, Farrell et al. disclosed the method of a processor sending a packet addressed to a destination endpoint that intentionally causes an intermediary node other than the destination endpoint to send back a message **(see paragraph 0017, lines 1-10, paragraph 0020, lines 1-12, paragraph 0021, lines 1-10, and fig. 1).** The trace or test packet is injected with TTL values, while gradually increasing. Upon time out, or when TTL=0, the intermediate node 106A sends back an error message 107 to source node 102. However, Farrell et al. did not disclose the method of the message containing an intermediate node timestamp value identifying when the packet reached the intermediate node.

Bennett from the same or similar fields of endeavor teaches the method of the message containing an intermediate node timestamp value identifying when the packet reached the intermediate node **(column 16, lines 45-67, column 17, lines 1-35).** As shown in column 17, example is taught. Host A sends an Echo request to D with a TTL of 255 and both intermediate nodes B and C insert Path Records, wherein the path records are the timestamps. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Bennett in the network of Farrell et al. The motivation for using the method as taught by Bennett in the network of Farrell et al. being that it increase the speed of error detection.

Regarding claim 11, Farrell et al. disclosed the method of the processor is enabled to specify a Time To Live (TTL) value in the packet insufficient to reach the destination endpoint, and causing the intermediary node to send back the message

when the TTL value is decremented to zero **(see paragraph 0021, lines 1-10, and fig. 1).**

Regarding claim 12, Farrell et al. disclosed the method of the processor modifies the TTL values in multiple packets causing multiple different intermediate nodes in a network to send back messages each containing a respective intermediate node timestamp values when the TTL values in the packets are decremented to zero by that intermediate node **(see paragraph 0021, lines 1-10, and fig. 1).** The source node 102 or the processor configured to modified TTL value to be 2 for the second packet.

Claim 21 is rejected similar to claim 1.

Claim 30 is rejected similar to claim 1.

Regarding claim 42, Farrell et al. disclosed the method of formatting a trace packet for transferring on a path that extends from an origination endpoint, through at least one intermediary node in the packet switched network, to a destination endpoint that is different than the intermediary node **(see paragraph 0018, paragraph 0017, paragraph 0020, paragraph 0021, and fig. 1).** The source transmits data to a destination node 104 over a route of nodes 106. The trace or test packet is injected with TTL values, while gradually increasing. Upon time out, or when TTL=0, the intermediate node 106A sends back an error message 107 to source node 102; selecting a Time To Live (TTL) value for the trace packet, the selected TTL value to intentionally cause the intermediate node to send back a packet expiration notice **(paragraphs 0020-0021).** The system able to select the TTL value to be 1 or 2; and receiving the packet expiration notice (paragraph 0020). An error message is generated when an expired

packet is received. However, Farrell et al. did not explicitly disclose the method of extracting an intermediate node time value from the packet expiration notice, the packet expiration notice inserted by the intermediate node and indicating when the intermediate node, not the destination node, received the trace packet said formatting including addressing the trace packet with a destination address that corresponds to the destination endpoint. Bennett from the same or similar fields of endeavor teaches the method of extracting an intermediate node time value from the packet expiration notice, the packet expiration notice inserted by the intermediate node and indicating when the intermediate node, not the destination node, received the trace packet **(column 16, lines 45-67, column 17, lines 1-35).** As shown in column 17, example is taught. Host A sends an Echo request to D with a TTL of 255 and both intermediate nodes B and C insert Path Records, wherein the path records are the timestamps. The hosts uses or extracting the information in the path records to determine the measurements between node B and node C; said formatting including addressing the trace packet with a destination address that corresponds to the destination endpoint **(column 17, lines 35-42).** The echo reply message has the address to which the information should be sent to. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Bennett in the network of Farrell et al. The motivation for using the method as taught by Bennett in the network of Farrell et al. being that it increase the speed of error detection.

Regarding claim 43, Farrell et al. disclosed the method of intermediate node time value is used, at least in part, to determine one-way packet delay from the source endpoint to the intermediate node **(see paragraph 0025-0027and fig. 1 and 2).**

7. Claims 2, 7-9, 13-15, 22, 27-29, 31, 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Bennett (Pat No.: 7336620), as applied to claim 1 above, and further in view of Adhikari et al. (Pub No.: 2004/0252646).

For claims 2, 22, 31 Farrell et al. and Bennett both silent on the method of including sending a source time value in the trace packet indicating when the trace packet was sent and receiving both the source time value and the intermediate node time value in the packet expiration notice. Adhikari et al. from the same or similar fields of endeavor teaches the method of including sending a source time value in the trace packet indicating when the trace packet was sent and receiving both the source time value and the intermediate node time value in the packet expiration notice **(see paragraph 0090, lines 1-10).** In this reference, endpoint A transmits a packet to endpoint B, A writes the departure time S from A in the packet itself. When B receives the packet, it writes the arrival time U in the packet. B immediately sends the packet back to A, writing the departure time V from B in the packet. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Adhikari et al. in the network of Farrell et al. and Bennett. The

motivation for using the method as taught by Adhikari et al. in the network of Farrell et al. and Bennett being that it increases the speed of error detection.

Regarding claim 7, 27, 36 Adhikari et al. disclosed the method of including formatting the trace packet as a Real Time Protocol (RTP) payload packet that travels along a same media path as corresponding RTP payload packets containing media content **(see paragraph 0056, lines 1-16).**

Regarding claim 39 Adhikari et al. disclosed the method of the trace packet is part of a same media stream as the RTP payload packets **(see paragraph 0056, lines 1-16).**

Regarding claim 8, 28, 37 Farrell et al. disclosed the method of including varying the TTL value and setting a marker bit in the trace packet causing the destination endpoint to send a corresponding Real Time Control Protocol (RTCP) report **(see paragraph 0017, lines 1-10, paragraph 0020, lines 1-12, paragraph 0021, lines 1-10, and fig. 1).** The trace or test packet is injected with TTL values, while gradually increasing. Upon time out, or when TTL=0, the intermediate node 106A sends back an error message 107 to source node 102. The marker bit is when TTL=0.

Regarding claim 9, 29, 38 Adhikari et al. disclosed the method of including determining whether or not to transmit a media stream according to contents of the RTCP report **(see paragraph 0056, lines 1-16).**

Regarding claim 13, Adhikari et al. disclosed the method of the processor discerns when the packet was sent and compares that time with the intermediate node timestamp value returned in the message to determine the one-way packet delay

between the processor and the intermediate node **(see paragraph 0059, lines 1-7, paragraph 0060-0063, and see paragraph 0090, lines 1-10).** In this reference, endpoint A transmits a packet to endpoint B, A writes the departure time S from A in the packet itself. When B receives the packet, it writes the arrival time U in the packet. B immediately sends the packet back to A, writing the departure time V from B in the packet.

Regarding claim 14, Adhikari et al. disclosed the method of the processor formats the packet as a Real Time Protocol (RTP) payload packet that travels along a same media path as associated RTP payload packets containing an actual media payload **(see paragraph 0056, lines 1-16).**

Regarding claim 15, Farrell et al. disclosed the method of the processor sets a Time To Live (TTL) value and a marker bit in the packet that causes the destination endpoint to send back a Real Time Control Protocol (RTCP) report **(see paragraph 0017, lines 1-10, paragraph 0020, lines 1-12, paragraph 0021, lines 1-10, and fig. 1).** The trace or test packet is injected with TTL values, while gradually increasing. Upon time out, or when TTL=0, the intermediate node 106A sends back an error message 107 to source node 102. The marker bit is when TTL=0.

8. Claims 4, 24, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Bennett (Pat No.: 7336620), as applied to claim 3 above, and further in view of Hefel et al. (Pat No.: 5563875).

For claim 4, 24, 33 Farrell et al. and Bennett both silent on the method of setting incrementally increasing TTL values in additional trace packets until the destination endpoint sends back a packet expiration notice with a time value associated with a one-way packet delay from the source endpoint to the destination endpoint. Hefel from the same or similar fields of endeavor teaches the method of setting incrementally increasing TTL values in additional trace packets until the destination endpoint sends back a packet expiration notice with a time value associated with a one-way packet delay from the source endpoint to the destination endpoint **(see column 6, lines 20-25).** Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Hefel et al. in the network of Farrell et al. and Bennett. The motivation for using the method as taught by Hefel et al. in the network of Farrell et al. and Bennett being that the method reduces the system waiting time, and increases the network speed.

9. Claims 5, 6, 25, 26, 34, 35 and 44 rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Bennett (Pat No.: 7336620), as applied to claim 1 above, and further in view of Makowski et al. (Pub No.: 2004/0240431).

For claim 5, 25, 34 Farrell et al. disclosed the method of using the ICMP message as the packet expiration notice **(see paragraph 0006, lines 12-18).** Farrell et al. and Bennett both silent on the method of using a Network Time Protocol (NTP)

timestamp value for the intermediate node time value; inserting the NTP timestamp value into an Internet Control Message Protocol (ICMP) reply message. Makowski et al. from the same or similar fields of endeavor teaches the method of using a Network Time Protocol (NTP) timestamp value for the intermediate node time value; inserting the NTP timestamp value into an Internet Control Message Protocol (ICMP) reply message **(see paragraph 0032, lines 1-12).** The ICMP is inserted with timestamp from the source and the destination. The timestamp can be generated in any well known manner such as NTP. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Makowski et al. in the network of Farrell et al. and Bennett. The motivation for using the method as taught by Makowski et al. in the network of Farrell et al. and Bennett being that the method enhances the packet delay.

Regarding claims 6, 26, 35 Makowski et al. disclosed the method of including using bits in an unused field of the ICMP message for containing the NTP timestamp value **(see paragraph 0032, lines 1-12).** The optional data fields of the ICMP echo request message, which has bits to represent the capacity of the fields.

Regarding claim 44 Makowski et al. disclosed the method of the packet expiration notice is a Internet Control Message Protocol (ICMP) message with a Network Time Protocol (NTP) timestamp inserted therein **(see paragraph 0032, lines 1-12).** The optional data fields of the ICMP echo request message, which has bits to represent the capacity of the fields.

10. Claim 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Wen et al. (Pat No.: 6947381).

For claim 16, Farrell et al. disclosed the method of For claim 16, Farrell et al. disclosed the method of a processor configured to receive a trace packet containing an expiration value causing the processor to discard the trace packet and generate an expiration message that identifies a time value associated with when the trace packet was received by the processor **(see paragraph 0025-0027and fig. 1 and 2).** The processor or an intermediate node 106 is configured to receive an application packet or trace packet from a source node 102. If node 106 detects error in the packet, it will generate an ICMP response error message back to source 102. The error corresponds to the TTL value had expired in transit. The process may also record the hop, or internodal segment time delay between the nodes at which the packet expired. Further detailed of measuring the internodal segment can be found in paragraph 0025, which states “by measuring the time between when an application packet is sent and when the error notification is received, it is also possible to determine a delay for each internodal segment on the route". However, Farrell et al. did not disclose the method of discard expired packet. Wen et al. from the same or similar fields of endeavor teaches the method of discard expired packet **(see column 2, lines 1-5).** Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Wen et al. in the network of Farrell et al. The motivation for using

the method as taught by Wen et al. in the network of Farrell et al. being that the method increases the system capacity.

Regarding claim 17, Farrell et al. disclosed the method of the network processing device is located at an intermediate location in a network between a source endpoint sending the trace packet and a destination endpoint for the trace packet **(see paragraph 0027, lines 1-17, and fig. 1 and 2).** The network-processing device is the intermediate node 106.

Regarding claim 18, Farrell et al. disclosed the method of the processor is configured to decrement the expiration value and forward the trace packet toward the destination endpoint when the decremented expiration value is not zero, the processor further configured to discard the trace packet and send the expiration message back to the source endpoint when the expiration Value is decremented to zero **(see paragraph 0017, lines 1-10, paragraph 0020, lines 1-12, paragraph 0021, lines 1-10, paragraph 0024, lines 5-12, and fig. 1).** The second large TTL or expiration value is 2 as shown in paragraph 0021. The use of TTL value is used to measure the delay experience by routers. The second application packet is return to the source when the TTL value is 0.

11. Claims 19 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Wen et al. (Pat No.: 6947381), as

applied to claim 16 above, and further in view of Makowski et al. (Pub No.: 2004/0240431).

For claim 19, Farrell et al. and Wen et al. disclosed all the subject matter of the claimed invention with the exception of the processor uses an Internet Control Message Protocol (ICMP) message as the expiration message and uses a Network Time Protocol (NTP) timestamp value as the time value. Makowski et al. from the same or similar fields of endeavor teaches the method of the processor uses an Internet Control Message Protocol (ICMP) message as the expiration message and uses a Network Time Protocol (NTP) timestamp value as the time value **(see paragraph 0032, lines 1-12).** The ICMP is inserted with timestamp from the source and the destination. The timestamp can be generated in any well known manner such as NTP. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Makowski et al. in the network of Farrell et al. and Wen et al. The motivation for using the method as taught by Makowski et al. in the network of Farrell et al. and Wen et al. being that the method enhances the packet delay.

Regarding claim 40, Makowski et al. disclosed the method of the Network Time Protocol (NTP) timestamp value is placed in an unused field of the ICMP message **(see paragraph 0032, lines 1-12).** The optional data fields of the ICMP echo request message, which has bits to represent the capacity of the fields.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Wen et al. (Pat No.: 6947381), as applied to claim 16 above, and further in view of Adhikari et al. (Pub No.: 2004/252646).

For claim 20, Farrell et al. and Wen et al. disclosed all the subject matter of the claimed invention with the exception of the trace packet is formatted as a media payload packet that uses a same media path as associated media packets containing a media payload. Adhikari et al. from the same or similar fields of endeavor teaches the method of the trace packet is formatted as a media payload packet that uses a same media path as associated media packets containing a media payload **(see paragraph 0056, lines 1-16).** Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Adhikari et al. in the network of Farrell et al. and Wen et al. The motivation for using the method as taught by Adhikari et al. in the network of Farrell et al. and Wen et al. being that the method accurately determines the link parameters such as the delay and the quality of service.

13. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Wen et al. (Pat No.: 6947381), and Adhikari et al. (Pub No.: 2004/252646), as applied to claim 20 above, and further in view of Gentle (Pub No.: 2004/0223458).

For claim 41, Farrell et al., Wen et al. and Adhikari et al. all did not disclose the method of the trace packet is part of a same media stream as the media packets containing the media payload. Gentle from the same or similar fields of endeavor teaches the method of the trace packet is part of a same media stream as the media packets containing the media payload **(paragraph 0014).** Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Gentle in the network of Farrell et al. Adhikari et al. and Wen et al. The motivation for using the method as taught by Gentle in the network of Farrell et al. Adhikari et al. and Wen et al. being that it provides a fast testing result.

14. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (Pub No.: 2006/0098586), in view of Bennett (Pat No.: 7336620), and Makowski et al. (Pub No.: 2004/0240431), as applied to claim 44 above, and further in view of Adhikari et al. (Pub No.: 2004/252646).

For claim 45, Farrell et al., Bennett, and Makowski et al. did not disclose the method of formatting the trace packet as a Real Time Protocol (RTP) payload packet that travels along a same media path as corresponding RTP payload packets containing media content. Adhikari et al. from the same or similar fields of endeavor teaches the method of formatting the trace packet as a Real Time Protocol (RTP) payload packet that travels along a same media path as corresponding RTP payload packets containing

media content **(see paragraph 0056, lines 1-16).** Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Adhikari et al. in the network of Farrell et al. Bennett and Makowski et al. The motivation for using the method as taught by Adhikari et al. in the network of Farrell et al. Bennett and Makowski et al. being that the method accurately determines the link parameters such as the delay and the quality of service.

Allowable Subject Matter

15. Claim 46 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art failed to teach the method of at a time the trace packet is sent, the existence of the destination node on the path is known by the originating endpoint while the existence of the intermediary node on the path is not known, such that the originating node receives back a communication indicating the time that a previously unknown node received the trace packet.

Conclusion

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2616

KY